What is claimed is:

1. A method of training a user to become an expert in identifying an object in an image, by querying a computer system comprising a lexicon of photo-interpreters, and formulating object extraction rules, the steps comprising:

a) providing a programming language comprising information supplied by at least one expert photo analyst, and information input by a user, said programming language comprising a set of predetermined vocabulary and syntax; and

b) outputing results based on queries of said user to aid in identifying an object.

2. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, wherein said results are output on a graphical display.

3. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, wherein said results comprise image files.

4. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, wherein said results comprise computer text files.

5. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, wherein said information input by said user comprises one from the group of images, scenes, maps and computer text.

6. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, wherein said programming language comprises a text editor.

7. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, wherein said programming language comprises an expert system.

8. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, wherein said programming language comprises an expert editor.

9. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, wherein said programming language is a pseudo-human language.

10. The method of training a user to become an expert in identifying an object in an image in accordance with claim 9, wherein said pseudo-human language is pseudo-English.

11. The method of training a user to become an expert in identifying an object in an image in accordance with claim 9, wherein said vocabulary of said programming language comprises any one of the group of principles: Tone, Texture, Size, Shape, Shadow, Pattern, Associated Features, and Stereo Scopic characteristics.

12. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, the steps further comprising:

c) marking an object on a display; and

d) directing the computer system to generate descriptive words, phrases, extraction rules, and image and text files for defining said object.

13. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, wherein said programming language further comprises extraction rule sets that are dependent upon said information supplied by said at least one expert.

14. The method of training a user to become an expert in identifying an object in an image in accordance with claim 1, further comprising matching means in said programming language for allowing a user to compare an observed object with stored prototypical objects.

15. A method of processing data to identify an object in an image, by querying a computer system comprising a lexicon of photo-interpreters, and formulating object extraction rules, comprising executing a computer program comprising (i) information supplied by at least one expert photo analyst, (ii) extraction rules that are dependent upon said information, and (iii) information input by a user, said computer program comprising a predetermined vocabulary for facilitating descriptions of objects to be identified.

16. The method of processing data in accordance with claim 15, wherein said information input by said user comprises one from the group of images, scenes, maps and computer text.

17. The method of processing data in accordance with claim 16, wherein the computer programming language is pseudo-English.

18. The method of processing data in accordance with claim 15, the steps further comprising:

marking an object on a display; and

directing the computer system to generate descriptive words, phrases, extraction rules and image and text files for defining said object.

19. A method of generating a database of information used to identify an object in an image, by querying a computer system comprising a lexicon of photo-interpreters, and formulating object extraction rules, comprising executing a computer program comprising information supplied by at least one expert photo analyst, and information input by a user.

20. The method of generating a database in accordance with claim 19, wherein said computer program further comprises extraction rule sets.

21. The method of generating a database in accordance with claim 20, wherein said information input by said user comprises one from the group of images, scenes, maps and computer text.

22. The method of generating a database in accordance with claim 21, wherein the computer programming language is pseudo-English.

23. The method of generating a database in accordance with claim 19, the steps further comprising marking an object on a display.

24. A method of training a user to become an expert in performing a task in a predetermined subject, by querying a computer system comprising a lexicon of words and phrases, and formulating rules dependent on said predetermined subject, the steps comprising:

a) providing a programming language comprising information supplied by at least one expert, said programming language comprising a predetermined vocabulary for facilitating descriptions of aspects of said subject; and

b) outputing results based on the queries of said user to aid in helping the user perform a task associated with said subject.

25. The method of training a user to become an expert in accordance with claim 24, the steps further comprising:

c) directing the computer system to generate descriptive words, phrases and rules for defining said feature of interest.

26. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, the steps further comprising:

c) marking a feature of interest of said presented results.

27. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said step (b) of outputing said results comprises displaying graphical results.

28. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said step (b) of outputing said results comprises generating audible signals.

29. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said step (b) of outputing said results comprises generating tactile results.

30. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said step (b) of outputing said results comprises generating odors.

31. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said feature of interest of said presented results comprises a step of a process.

32. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said feature of interest of said presented results comprises an object of an image or scene.

33. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said programming language comprises an editor.

34. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said editor is an expert editor.

35. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said programming language comprises an expert system.

36. The method of training a user to become an expert in performing a task in a predetermined subject in accordance with claim 24, wherein said programming language is a pseudo-human language.

37. A method for generating a fraction plane in real time and for recognizing objects in a hyperspectral image cube that has a plurality of spectral regions, as a sum of a set of discrete data representative of each of said spectral regions, the steps comprising:

a) obtaining a set of calibration samples of a group of candidate objects; and

b) using a Newton gravity model to compute the cumulative influence of substantially all of said spectral regions on at least one of said spectral regions, building a pseudo multivariate distribution thereof.

38. The method for generating a fraction plane in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 37, the steps further comprising:

c) extracting recognizable features from said hyperspectral image cube.

39. The method for generating a fraction plane in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 37, wherein a physical-phenomenon model is stored in a library.

40. The method for generating a fraction plane in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 38, wherein said extraction step (c) is performed by utilizing a pseudo-English-language program.

41. A method for generating texture transforms substantially in real time and for recognizing objects comprising pixels in a hyperspectral image cube that has a plurality of spectral regions, as a sum of a set of discrete data representative of each of said spectral regions, the steps comprising:

a) obtaining a set of calibration samples of a group of candidate objects; and

b) computing the cumulative influence of at least some neighboring pixels of said spectral regions on at least one of said spectral regions.

42. The method for generating texture transforms substantially in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 41, the steps further comprising:

c) extracting recognizable features from said hyperspectral image cube.

43. The method for generating texture transforms substantially in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 41, wherein a physical-phenomenon model is stored in a library.

44. The method for generating texture transforms substantially in real time and for recognizing objects in a hyperspectral image cube in accordance with claim 42, wherein said extraction step (c) is performed by utilizing a pseudo-English-language program.

45. A method of training a user to become an expert in identifying an observed object in an image, by querying a computer system comprising a lexicon of photo-interpreters, and formulating object extraction rules, the steps comprising:

a) providing a programming language comprising information supplied by at least one expert photo analyst, and information input by a user, said programming language comprising a set of predetermined vocabulary and syntax; and

b) using said programming language to analyze at least one portion of an image or data representative thereof, and determining whether an observed object in said image is articulatable by using descriptors therefor; and

c) matching said observed object to a known, articulatable object and generating a first confidence level based on said matching step, if said object is not articulatable.

46. The method of training a user in accordance with claim 45, the steps further comprising:

d) extracting recognizable features from said observed object, and assigning a second confidence level thereto, if said object is articulatable.

47. The method of training a user in accordance with claim 46, the steps further comprising:

e) combining said confidence levels of said observed objects to generate a composite confidence level thereof.

48. The method of training a user in accordance with claim 45, wherein said user is a machine.

49. A method of training a user to become an expert in performing a task in a predetermined subject, by querying a computer system comprising a lexicon of words and phrases, and formulating rules, the steps comprising:

a) providing a programming language comprising information supplied by at least one expert, said programming language comprising a set of predetermined vocabulary and syntax; and

b) using said programming language to analyze at least one task or data representative thereof, and determining whether said task is articulatable by using descriptors therefor; and

c) matching said task to a known, articulatable task and generating a first confidence level based on said matching step, if said task is not articulatable.

50. The method of training a user in accordance with claim 49, the steps further comprising:

d) recognizing the task and assigning a second confidence level thereto, if said task is articulatable.

51. The method of training a user in accordance with claim 50, the steps further comprising:

e) combining said confidence levels of said tasks to generate a composite confidence level thereof.

52. The method of training a user in accordance with claim 49, wherein said user is a machine.